

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)	
	)	
TABATABAI et al.	)	Examiner: SHANG, A.
	)	
Serial Number: 09/865,030	)	Art Unit: 2424
	)	
Filing Date: May 24, 2001	)	Conf. No.: 2901
	)	
For: COMMAND DESCRIPTION SCHEME	)	
PROVIDING FOR DYNAMIC UPDATE	)	
OF INSTANCE DOCUMENTS AND	)	
THEIR ASSOCIATED SCHEMA	)	
	)	

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APPEAL BRIEF

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### 1. Real Party in Interest

The real parties in interest are: Sony Corporation of Japan, and Sony Electronics, Inc.

### 2. Related Appeals and Interferences

There are no related appeals or interferences known to the Appellants.

### 3. Status of Claims

Claims 1-9, 11-25 and 27-28 are pending. Claims 10 and 26 have been canceled. Claims 1-9, 11-25 and 27-28 are rejected under 35 U.S.C. § 103(a). This appeal involves Claims 1-9, 11-25 and 27-28.

### 4. Status of Amendments

An amendment has not been filed subsequent to the final rejection.

### 5. Summary of Claimed Subject Matter

With reference to Figures 1 and 2, independent Claim 1 describes a method, implemented on a server 202a, to update descriptions 206a and 206b of audio-visual content 216 residing at a client 204. The descriptions are associated with one another to form a data structure 206 that includes a number of nodes (e.g., node 208), where a node contains information describing an attribute of the item of audio-visual content (page 8, lines 8-13). The server sends a command to the client (block 410), indicating a type of update to make at a particular node 208 of the data structure (page 13, lines 5-7). The server also sends the location of the particular node to the client (block 415; page 13, lines 12-13). The server also retrieves any data related to the update to the client

(block 420), and the client in turn executes the command and performs the update using Data Description Language (DDL) (page 13, line 18, through page 14, line 20).

Independent Claim 11 describes a method, implemented in a system that includes a first computer system 202a and a second computer system 204, for updating a description of an item of audio-visual content 206a (or 206b) that is stored on the second computer system. Similar to Claim 1, descriptions are associated with one another to form a data structure 206 that includes a number of nodes (e.g., node 208), where a node contains information describing an attribute of the item of audio-visual content (page 8, lines 8-13). The first computer system sends a command to the second computer system (block 410), indicating a type of update to make at a particular node 208 of the data structure (page 13, lines 5-7). The first computer system also sends the location of the particular node to the second computer system (block 415; page 13, lines 12-13). The first computer system also retrieves any data related to the update to the client (block 420), and the second computer system in turn executes the command and performs the update using DDL (page 13, line 18, through page 14, line 20).

With reference also to Figure 4, independent Claim 23 describes instructions stored on computer readable medium 102 residing on a first computer system 202a. The instructions cause a processor 101 of the first computer system to instruct a processor of a second computer system 204 to update an audio-visual content description residing on the second computer system. Similar to Claims 1 and 11, descriptions are associated with one

another to form a data structure 206 that includes a number of nodes (e.g., node 208), where a node contains information describing an attribute of the item of audio-visual content (page 8, lines 8-13). The first computer system sends a command to the second computer system (block 410), indicating a type of update to make at a particular node 208 of the data structure (page 13, lines 5-7). The first computer system also sends the location of the particular node to the second computer system (block 415; page 13, lines 12-13). The first computer system also retrieves any data related to the update to the client (block 420), and the second computer system in turn executes the command and performs the update at the specified location using DDL (page 13, line 18, through page 14, line 20).

According to Claims 2, 12 and 13, a determination is made as to whether the update is authorized (block 405; page 13, lines 1-2).

According to Claims 3 and 14, the command sent from the server/first computer system to the client/second computer system is to add a node to the data structure, which the client/second computer system accomplishes by deriving an extension (block 425; page 13, line 23 through page 14, line 2).

According to Claims 4 and 15, the command sent from the server/first computer system to the client/second computer system is to delete a node from the data structure, which the client/second computer system accomplishes by deriving by restriction (block 430; page 14, lines 4-6).

According to Claims 5 and 16, the command sent from the server/first computer system to the client/second computer system is to change the information contained by the particular node 208, which the client/second computer system accomplishes by a combination of deriving an extension and deriving by restriction (blocks 435, 440 and 445; page 14, lines 8-15).

According to Claims 6 and 17, the client/second computer system alters the data structure 206 (page 13, line 23, through page 14, line 15).

According to Claim 7, the client 204 alters a parameter at a node in the data structure 206 (page 14, lines 8-15).

According to Claim 8, the server 202a issues a derive by restriction command (page 14, lines 4-6).

According to Claim 9, the server 202a issues a derive by extension command (page 13, line 23, through page 14, line 2).

According to Claim 18, the description of the item of audio-visual content is organized as a tree structure and the update modifies a parameter at a node of the tree structure (page 9, lines 1-5).

According to Claim 19, a selection is made from among a set of data stored on the first computer system 202a to update the description of the item of audio-visual content stored on the second computer system 204 (page 13, line 20).

According to Claim 20, the first and the second computer systems 202a and 204 form a peer-to-peer system (page 10, lines 16-17).

According to Claim 21, the first computer system 202a receives a request for information from the second computer system 204 and initiates a pull operation (page 10, lines 17-18).

According to Claim 22, the first computer system 202a makes a determination that the description of the item of audio-visual content stored on the second computer system 204 should be updated and initiates a push operation (page 10, lines 17-18).

According to Claim 24, the command sent from the first computer system 202a to the second computer system 204 is an add, a delete, or a change command (page 13, line 23, through page 14, line 2; page 14, lines 4-6 and lines 8-15).

According to Claim 25, the location specified by the first computer system 202a is a relative address or an absolute address (page 13, lines 13-16).

According to Claim 27, the instructions (of Claim 23) specify a security level to determine whether the update is allowed (page 16, lines 12-19).

According to Claim 28, the instructions (of Claim 23) are compliant with the Extensible Markup Language (XML) (page 13, lines 8-10).

## 6. Grounds of Rejection to be Reviewed on Appeal

Claims 1-3, 6-7 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,751,623 (“Basso”) in view of U.S. Patent No. 6,593,936 (“Huang”). Claims 11-25 and 27-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Huang in view of Basso. Claims 4-5 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Basso in view of Huang, and further in view of ISO/IEC MPEG 00/N3575 (“ISO/IEC”).

## 7. Arguments

A. The following arguments are applicable to Claims 1-3, 6-7 and 9, which are rejected under 35 U.S.C. § 103(a) as being unpatentable over Basso and Huang.

According to the claims, a description of audio-visual content resides on one computer system (e.g., a client). Instead of transferring an entirely new description from another computer system (e.g., a server) to the client in order to perform an update at a particular node of the description, the server sends to the client: i) a command that indicates the type of update (e.g., an add, delete or change command), ii) the location of the particular node, and iii) any data related to the update. The client can then execute the command and perform the update.

Appellants respectfully submit that these limitations are not shown or suggested by Basso and Huang, alone or in combination.



According to the final rejection, Basso is relied upon to teach “said server sending to said client a command indicating a type of update to make at a particular node of a data structure residing at said client and describing an item of content, wherein said particular node contains information describing an attribute of said item of audio-visual content and wherein said particular node is one of a plurality of nodes of said structure, wherein said plurality of nodes are associated with one another to form said structure; said server sending to said client the location of said particular node in said description; and said server retrieving and sending to said client any data related to said update” as recited in independent Claim 1.

Appellants respectfully submit that Basso does not teach that which it is relied upon as teaching.

According to Basso (column 5, lines 14-35; for clarity, material is presented in a different order than in the reference), “a session processes or presents a ... scene;” “components of a scene are coded as independent objects;” and “objects are transmitted ... along with scene description information.” According to Basso, “a set of ... files can be used to provide a complete session, with one of the set of ... files acting as a master file;” “objects that are related to a session ... will reside in one or more ... [of the] files;” “objects ... can be referenced by the master file, or any other file of a session, using universal resource locator (URL) calls. These ... objects can be stored in a remotely locally-available file ... located at the same client or host computer as the session files. Alternatively, these objects ... can be stored in a remotely stored file ... accessed over a distributed network.”

According to Basso, “the scene description information is organized using a tree structure” and “scene descriptions can be dynamically updated” (column 5, lines 38-39, and column 4, line 63, respectively). According to Basso, a “file should allow easy editing” (column 3, lines 15-16).

Appellants respectfully submit that such generalizations do not show or suggest the specific limitations of Claim 1. While, according to Basso, it may be possible to update scene descriptions organized in a tree structure, Basso fails to teach how that that would be done. Appellants respectfully submit that neither the material cited above, nor Basso taken in its entirety, shows or suggests the specific limitations of Claim 1, which precisely recites “said server sending to said client a command indicating a type of update to make at a particular node of a data structure residing at said client and describing an item of content, wherein said particular node contains information describing an attribute of said item of audio-visual content and wherein said particular node is one of a plurality of nodes of said structure, wherein said plurality of nodes are associated with one another to form said structure; said server sending to said client the location of said particular node in said description; and said server retrieving and sending to said client any data related to said update.”

Basso apparently teaches objects can be remotely located. Basso apparently teaches that the objects can be transmitted with scene description information, although Basso does not appear to specifically teach that the scene description information can be remotely located. Regardless, Basso apparently teaches that the scene description information can be updated. Presumably,

objects can also be updated, although Basso does not appear to teach that feature. Nevertheless, Basso fails to teach, or even suggest, how scene descriptions are updated. Appellants respectfully submit that Basso provides no details with regard to the manner in which objects and/or scene descriptions are updated.

According to the final rejection, Basso “teaches that new instructions or rules can be transmitted to control the structural organization to allow easy and programmable or modification (sic) of structural organization to support multiple protocols. The new instructions or rules transmitted from the server to the client for changing structure reorganization of the various nodes of the tree and dynamically updates information of particular nodes of the tree (sic) (col. 5, lines 10-51, col. 25, line 53 – col. 26, line 32 and line 48 – col. 27, line 49)” (emphasis added). This is simply not correct, at least as understood. Appellants respectfully submit that neither the portions of Basso specifically cited in the final rejection, nor Basso in its entirety, shows or suggests what the Office Action says they teach, specifically “new instructions or rules transmitted from the server to the client for changing structure reorganization of the various nodes of the tree and dynamically updates information of particular nodes of the tree,” for the reasons already presented and for the additional reasons below.

The portions of Basso cited in the final rejection and repeated in the preceding paragraph apparently teach that Basso’s “Integrated Intermedia Format (IIF) organizes ... media data into segments;” that the “segment data could include access units that belong to a single object or multiple objects ...;” and that “[s]ince all access units are indexed relative to the beginning of a

segment, the contents of a segment can be edited with in a segment with changes made to only a single entry in the access table that points to the segments (column 25; lines 1-2, 38-42 and 54-56; emphasis added).

Appellants respectfully submit that neither these portions of Basso, nor Basso in its entirety, shows or suggests, generally, a server sending to the client: i) a command that indicates the type of update, ii) the location of the particular node, and iii) any data related to the update – the client can then execute the command and perform the update. The portions of Basso cited above appear to describe only a change to an access table. Regardless, Appellants respectfully submit that neither those portions of Basso, nor Basso in its entirety, shows or suggests “said server sending to said client a command indicating a type of update to make at a particular node of a data structure residing at said client and describing an item of content, wherein said particular node contains information describing an attribute of said item of audio-visual content and wherein said particular node is one of a plurality of nodes of said structure, wherein said plurality of nodes are associated with one another to form said structure; said server sending to said client the location of said particular node in said description; and said server retrieving and sending to said client any data related to said update” as recited in Claim 1.

The remainder of the cited portions of Basso appears to pertain primarily to the streaming of data and not to the updating of descriptions, although Basso does state “protocol-specific meta-data can be included to support multiple protocols and payload formats. Dynamic data reorganization is obtained by modifying only the meta-data. Extensibility ... is obtained by adding new

construction rules and possibly new property specifications in the meta-object” (column 27, lines 25-32). However, Appellants respectfully submit that such generalizations do not show or suggest the specific limitations of Claim 1.

Basso follows the discussion summarized above with a discussion of meta-objects that apparently describe how objects and segments are generated, and that contain information of the properties associated with the objects. However, that discussion does not show or suggest how those properties are located and updated. In other words, Appellants respectfully submit that the meta-object discussion does not show or suggest the specific limitations of Claim 1.

Appellants respectfully submit that, at best, Basso teaches “a framework which allows an easy and programmable organization of media-data” (column 27, lines 10-14). While it may be possible to update such a framework, Basso fails to teach how updates are performed.

Appellants respectfully submit that embodiments of the present claimed invention recite methods and systems that include additional features that may be integrated into or added on top of frameworks such as, but not limited to, Basso’s framework. That is, Appellants respectfully submit that embodiments of the present claimed invention describe methods for updating a particular node within such a framework from a remote location by simply providing a command that indicates the type of update, the location of the particular node, and any data related to the update. Appellants submit that Basso does not teach such methods.

Appellants respectfully submit that Huang does not overcome the shortcomings of Basso, as noted on pages 6 and 7 of the final rejection. Specifically, according to the final rejection, "Huang fails to specifically disclose the first computer system retrieving and sending command (sic) to the second computer system to perform a specified update of at least one node of a structure of the description, where nodes of the structure comprise the descriptions of portion (sic) of the audio-visual content information and the first computer system sending a location of a node in the description for the update to the second computer system."

Therefore, Appellants respectfully submit that Basso and Huang, alone or in combination, do not show or suggest details of how scene descriptions are updated and/or which device performs such updates. In particular, Appellants respectfully submit that Basso and Huang, alone or in combination, do not show or suggest "said server sending to said client a command indicating a type of update to make at a particular node of a data structure residing at said client ...; said server sending to said client the location of said particular node in said description; and said server retrieving and sending to said client any data related to said update, wherein said client executes said command and performs said update" as recited in Claim 1.

Each of the Claims 2-3, 6-7 and 9 includes all of the limitations of independent Claim 1 plus additional limitations. Appellants respectfully submit that Basso and Huang, alone or in combination, do not show or suggest the limitations of Claims 2-3, 6-7 and 9 in combination with the limitations of Claim 1.

Furthermore, Appellants respectfully submit that Claims 2-3, 6-7 and 9 are in condition for allowance as depending from an allowable claim.

In summary, Appellants respectfully assert that the basis for rejecting Claims 1-3, 6-7 and 9 under 35 U.S.C. § 103(a) is traversed.

B. The following arguments are applicable to Claims 11-25 and 27-28, which are rejected under 35 U.S.C. § 103(a) as being unpatentable over Huang and Basso.

As presented above, Appellants respectfully submit that Huang and Basso, alone or in combination, do not show or suggest the limitations of Claim 1. By similar rationale, Appellants respectfully assert that Huang and Basso, alone or in combination, do not show or suggest the limitations of independent Claims 11 and 23.

More specifically, Appellants respectfully agree with the statement on pages 6 and 7 of the final rejection that "Huang fails to specifically disclose the first computer system retrieving and sending command (sic) to the second computer system to perform a specified update of at least one node of a structure of the description, where nodes of the structure comprise the descriptions of portion (sic) of the audio-visual content information and the first computer system sending a location of a node in the description for the update to the second computer system."

For the reasons presented in the discussion above, Appellants further submit that Basso fails to overcome the shortcomings of Huang.

Accordingly, Appellants respectfully assert that the basis for rejecting Claims 11 and 23 under 35 U.S.C. § 103(a) is traversed and that Claims 11 and 23 are in condition for allowance.

Each of the Claims 12-22 includes all of the limitations of independent Claim 11 plus additional limitations. Each of the Claims 24-25 and 27-28 includes all of the limitations of independent Claim 23 plus additional limitations. Appellants respectfully submit that Huang and Basso, alone or in combination, do not show or suggest the limitations of Claims 12-22, 24-25 and 27-28 in combination with the limitations of their respective base claims. Furthermore, Appellants respectfully submits that Claims 12-22, 24-25 and 27-28 are in condition for allowance as depending from an allowable claim.

In summary, Appellants respectfully assert that the basis for rejecting Claims 11-25 and 27-28 under 35 U.S.C. § 103(a) is traversed.

C. The following arguments are applicable to Claims 4-5 and 8, which are rejected under 35 U.S.C. § 103(a) as being unpatentable over Basso, Huang and ISO/IEC.

Claims 4-5 and 8 depend from independent Claim 1. Hence, by demonstrating that the combination of cited references does not show or suggest the limitations of Claim 1, it is also demonstrated that the combination of cited



references does not show or suggest the additional limitations of Claims 4-5 and 8.

As presented above, Appellants respectfully assert that Basso and Huang, alone or in any combination, do not show or suggest the limitations of Claim 1. Appellants further assert that ISO/IEC does not overcome the shortcomings of Basso and Huang. The shortcomings of ISO/IEC with regard to the present claimed invention are presented in the Background Art section of the instant application. More specifically, while ISO/IEC may teach the use of descriptors and a hierarchical tree or graph structure as described on page 2 of the application, Appellants respectfully submit that ISO/IEC, alone or in combination with Basso and Huang, does not show or suggest details of how scene descriptions are updated and/or which device performs such updates. In particular, Appellants respectfully submit that Basso, Huang and ISO/IEC, alone or in combination, do not show or suggest “said server sending to said client a command indicating a type of update to make at a particular node of a data structure residing at said client ...; said server sending to said client the location of said particular node in said description; and said server retrieving and sending to said client any data related to said update, wherein said client executes said command and performs said update” as recited in Claim 1.

Therefore, Appellants respectfully assert that Basso, Huang and ISO/IEC, alone or in combination, do not show or suggest the limitations of independent Claim 1 and that Claim 1 is patentable over Basso, Huang and ISO/IEC. Accordingly, Appellants respectfully assert that the basis for rejecting Claims 4-5

and 8 under 35 U.S.C. § 103(a) is traversed and that Claims 4-5 and 8 are in condition for allowance as being dependent on an allowable base claim.

#### 8. Conclusions

Appellants believe that Claims 1-9, 11-25 and 27-28 traverse the bases for rejection under 35 U.S.C. § 103(a).

Appellants respectfully request that the rejections of Claims 1-9, 11-25 and 27-28 be reversed.

Respectfully submitted,

MURABITO HAO & BARNES LLP

Dated: 01-26-2009

/William A. Zarbis/

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Appendix I – Clean Copy of Claims on Appeal

1. (Previously Presented) In a server, a method for dynamically updating descriptions of audio-visual content information at a client, said method comprising:

said server sending to said client a command indicating a type of update to make at a particular node of a data structure residing at said client and describing an item of content, wherein said particular node contains information describing an attribute of said item of audio-visual content and wherein said particular node is one of a plurality of nodes of said structure, wherein said plurality of nodes are associated with one another to form said structure;

said server sending to said client the location of said particular node in said description; and

said server retrieving and sending to said client any data related to said update, wherein said client executes said command and performs said update using Data Description Language (DDL).

2. (Previously Presented) The method of Claim 1 further comprising:  
determining whether said update is authorized to be performed.

3. (Previously Presented) The method of Claim 1 wherein said sending said command indicating said type of update comprises:

issuing a command to add a node to said structure, wherein said client accomplishes said add by deriving an extension.

4. (Previously Presented) The method of Claim 1 wherein said sending said command indicating said type of update comprises:

issuing a command to delete a node from said structure, wherein said client accomplishes said delete by deriving by restriction.

5. (Previously Presented) The method of Claim 1 wherein said sending said command indicating said type of update comprises:

issuing a command to change said information contained by said particular node, wherein said client accomplishes said change by a combination of deriving an extension and deriving by restriction.

6. (Previously Presented) The method of Claim 1 wherein said client alters said structure.

7. (Previously Presented) The method of Claim 1 wherein said client alters a parameter at a node of said plurality of nodes.

8. (Previously Presented) The method of Claim 1 wherein said sending said command indicating said type of update comprises:

issuing a derive by restriction command.

9. (Previously Presented) The method of Claim 1 wherein said sending said command indicating said type of update comprises:

issuing a derive by extension command.

10. (Canceled).

11. (Previously Presented) In a system comprising a first computer system and a second computer system coupled to said first computer system via a communication link, said second computer system having stored thereon a description of an item of audio-visual content, a method for dynamically updating said description, said method comprising:

said first computer system sending a command to said second computer system to perform a specified update at a particular node of a data structure of said description, wherein said structure resides on said second computer system and wherein nodes of said structure comprise information describing respective attributes of said item of audio-visual content;

said first computer system sending to said second computer system a location of said particular node in said description for said update;

said first computer system retrieving and sending any data related to said update to said second computer system, wherein said second computer system executes said command and performs said update using Data Description Language (DDL).

12. (Previously Presented) The method of Claim 11 further comprising:

said first computer determining whether said update is authorized to be performed.

13. (Previously Presented) The method of Claim 11 further comprising:

said second computer system determining whether said first computer system is authorized to instruct said update.

14. (Previously Presented) The method of Claim 11 wherein said sending said command comprises:

issuing a command to add a node to said structure.

15. (Previously Presented) The method of Claim 11 wherein said sending said command comprises:

issuing a command to delete a node from said structure.

16. (Previously Presented) The method of Claim 11 wherein said sending said command comprises:

issuing a command to change information contained by said particular node.

17. (Previously Presented) The method of Claim 11 wherein said second computer system alters a schema of said description, wherein said description comprises a tree structure and said update modifies said tree structure.

18. (Previously Presented) The method of Claim 11 wherein said second computer system alters instance information, wherein said description comprises a tree structure and said update modifies a parameter at a node of said tree structure.

19. (Previously Presented) The method of Claim 11 further comprising:  
selecting from among a set of data stored on said first computer system to update said description on said second computer system.

20. (Original) The method of Claim 11 wherein said first and said second computer systems form a peer-to-peer system.

21. (Previously Presented) The method of Claim 11 further comprising:  
receiving a request from said second computer system for information,  
wherein a pull operation is initiated.

22. (Previously Presented) The method of Claim 11 further comprising:  
determining that said description stored on said second computer system  
should be updated, wherein a push operation is initiated.

23. (Previously Presented) A computer readable medium residing on a  
first computer system having instructions stored thereon for causing a processor  
of said first computer system to instruct a processor of a second computer  
system to dynamically update an audio-visual content description residing on  
said second computer system, said instructions comprising:

said first computer system sending to said second computer system a  
command specifying an update at a particular node of a data structure of said  
description, wherein said structure resides on said second computer system and  
is associated with an item of content, wherein said particular node comprises  
information describing an attribute of said item of audio-visual content and  
wherein said particular node is one of a plurality of nodes of said structure, and  
wherein said plurality of nodes are associated with one another to form said  
structure;

said first computer system retrieving and sending any data that is related  
to said update to said second computer system; and

said first computer system specifying to said second computer system a location of said particular node in said description, wherein said second computer system executes said command and performs said update using Data Description Language (DDL) using said data and said location sent by said first computer system.

24. (Previously Presented) The computer-readable medium of Claim 23 wherein said command is selected from the group consisting of add, delete, and change commands.

25. (Previously Presented) The computer-readable medium of Claim 23 wherein said location comprises an address selected from the group consisting of a relative address in said description and an absolute address in said description.

26. (Canceled).

27. (Previously Presented) The computer-readable medium of Claim 23 wherein said instructions further comprise specifying a security level to determine whether said update is allowed.

28. (Previously Presented) The computer-readable medium of Claim 23 wherein said instructions are compliant with the Extensible Markup Language (XML).



## Appendix II – Evidence

There is no evidence entered and relied upon in this appeal.

### Appendix III – Related Proceedings

There are no proceedings identified as related appeals and interferences.